Committee to Minimize Toxic Waste, Pamela Sihyola, Co-Chair Page 10 of 10

Specific comment and questions re: LLNL SW/SPEIS - Summary p.S-19 titled: BERKELEY WASTE DRUMS

- What is the exact content of the 14 drums (3000 liters) of transuranic and mixed transuranic waste?
- 2. Where are these drums currently stored at LBNL?
- 3. What radioactive isotopes do the drums contain?
- 4. What is the radioactivity of each drum?
- 5. What are the hazardous constituents of the transuranic mixed waste?
- 6. What is the proposed location for the solidification of the liquid waste?
- 7. What is the proposed location for the neutralization of the corrosive mixed transuranic waste?
- 8. What permits will LBNL need to perform the above mentioned waste treatment?
- 9. Is this kind of waste treatment allowed under LBNL's HWHF's Part B. Permit?
- 10. Where did this waste originate at LBNL?
- 11. What are laws that govern the packaging and shipment of this waste?

We categorically object to any treatment, repackaging, opening etc. of any of these waste drums onsite at LBNL.

We request that the strictest laws be observed with respect to shipping protocols mandated by DOE and DOT, without any exemptions.

Conable, Sherry Page 1 of 3

Dear Mr Grim:

I would like to add the following comments to the ones below that I am submitting at the request of TriValley cares in Livermore - they are doing the most important and valuable work and I thank then!

the proposed expansion at Livermore is frightening and truly hard to believe at this juncture in history - it is time for this nation to take responsibility for stopping the proliferation of weapons of all kinds, and especially WMD, and for beginning a true path of disarmament this proposal puts us in a position of great hypocrisy in the world community and stands in direct contradiction to the creative intention of the universe and the commitments we need to be making now to come into alignment with that intention that intention moves toward love and gentleness and reverence for all of life and for this planet itself, not toward destruction or the means to destroy and injure

I thank for your careful consideration and review of a proposal that should be abandoned

sincerely

sherry conable

Please consider this letter with my comments on the environmental and proliferation risks from proposed nuclear weapons development and new plutonium and tritium programs at the U.S. Department of Energy's (DOE) Lawrence Livermore National Laboratory (LLNL).

I write to you because the DOE has prepared a draft Site Wide Environmental Impact Statement (SWEIS) that proposes to ramp up nuclear weapons activities at the Livermore Lab in Northern California. Livermore Lab is working on the design of a new, high-yield nuclear bunker-buster, called the "Robust Nuclear Earth Penetrator," and I oppose its development. Additionally, I oppose the development of so-called "mini-nukes" and other new nuclear weapons concepts being researched at Livermore Lab.

Here are my comments on six dangerous new programs being proposed at Livermore Lab.

1. Storage of More Nuclear Materials: This plan will more than double the storage limit for plutonium at Livermore Lab from 1,540 pounds to 3,300 pounds. It would increase the radioactive tritium storage limit from 30 grams to 35 grams. I join California Peace Action and the Livermore-based Tri-Valley CAREs group in calling on DOE to de-inventory the plutonium and tritium stocks at Livermore Lab, not increase them.

2. Plutonium Atomic Vapor Laser Isotope Separation (AVLIS): This plan will revive a project that was canceled more than 10 years ago because it was dangerous and unnecessary. The project is Plutonium AVLIS. This is a scheme to heat and vaporize plutonium and then shoot multiple laser beams through the hot vapor to separate out

20/36.01

March 2005

2-81

Chapter 2 - Comment Documents LLNL SW/SPEIS

Conable, Sherry Page 2 of 3

Conable, Sherry Page 3 of 3

33.01 cont.

4/27.01.1 plutonium isotopes. To do this, Livermore Lab plans to increase the amount of plutonium that can be used at one time in any one room from 44 pounds to 132 pounds a 3-fold increase. I join California Peace Action and the Livermore-based Tri-Valley CAREs in calling for cancellation of this project.

5/26.01 26.03

3. Dangerous New Experiments in the National Ignition Facility Mega-Laser: This plan will add plutonium, highly-enriched uranium and lithium hydride to experiments in the National Ignition Facility (NIF) mega-laser when it is completed at Livermore Lab. Using these materials in the NIF will increase its usefulness for nuclear weapons development. It will also make the NIF more hazardous to workers and the environment. I join California Peace Action and the Livermore-based Tri-Valley CAREs in calling for a close out of the NIF project and termination of plans to use plutonium and other new materials in it.

6/37.01

4. New Technologies for Producing Plutonium Bomb Cores: This plan makes Livermore Lab the place to test new manufacturing technologies for producing plutonium pits for nuclear weapons. A pit is the softball-sized piece of plutonium that sits inside a modern nuclear weapon and triggers its thermonuclear explosion. DOE says these new technologies will then be used in a new bomb core factory, called the Modern Pit Facility (MPF). The Livermore Lab plutonium pit program will enable the MPF and production of 150 - 450 plutonium bomb cores annually, with the ability to run double shifts and produce 900 per year. This production capability would approximate the combined nuclear arsenals of France and China each year. I join California Peace Action and the Livermore-based Tri-Valley CAREs in calling for termination of this technology development project.

7/39.01

5. Enhancing Readiness to Resume Full-Scale Nuclear Tests: This plan calls for Livermore Lab to develop diagnostics to "enhance" the nation's readiness to conduct fullscale underground nuclear tests at the Nevada Test Site. This is a dangerous step back to the days of unrestrained nuclear testing and I join with California Peace Action and Tri-Valley CAREs to oppose any move to "enhance" U.S. readiness to conduct full-scale tests.

8/35.01

6. Mixing Bugs and Bombs: This plan mixes bugs and bombs at Livermore Lab. It calls for collocating an advanced bio-warfare agent research facility with nuclear weapons activities in a classified area at Livermore Lab. The DOE proposes genetic modification and aerosolization (spraying) with live anthrax, plague and other deadly pathogens on site at LLNL. This could weaken the international biological weapons treaty -- and it poses a risk to workers, the public and the environment here in the California. Interestingly, this program is listed as part of LLNL's "no action alternative" as though it were an existing program -- even though it is not yet constructed, Tri-Valley CAREs has brought litigation against it, and a federal Judge has issued a "stay" prohibiting the importation of dangerous pathogens into the facility while the lawsuit moves forward. I join Tri-Valley CAREs in opposing the operation of a bio-warfare agent facility at Livermore Lab.

I believe the DOE plan to introduce new weapons programs into LLNL will promote a new arms race and escalate the nuclear danger. Further, the DOE proposal to double 9/04.01 LLNL's plutonium storage limit to 3,300 pounds and triple the amount held "at risk" in any one room increases the environmental threat LLNL poses to the people of California. The SWEIS propels Livermore Lab in exactly the wrong direction.

Instead of proposing new weapons projects, DOE should enhance the peaceful, civilian scientific capabilities and mission at Livermore Lab by proposing new, unclassified 10/07.01 programs in environmental cleanup, non-polluting and renewable energy, earth sciences, astrophysics, atmospheric physics and others. The alternative of a "green lab" in Livermore should be pursued instead of the dangerous nuclear weapons future proposed by the Site Wide Environmental Impact Statement.

Sincerely,

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2-82 March 2005 LLNL SW/SPEIS Chapter 2 - Comment Documents

Concerned Citizens for Nuclear Safety, Amy Williams, Media Network Coordinator Page 1 of 4



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May 27, 2004

By fax to: (925) 422-1776

Thomas Grim, L-293 U.S. Department of Energy National Nuclear Security Administration Livermore Site Office, SWEIS Document Manager 7000 East Avenue Livermore, CA 94550-9234

Comments on the draft Site-Wide Environmental Impact Statement (SWEIS) for Continued Operations at Lawrence Livermore National Laboratory (LLNL) prepared by the Department of

Dear Mr. Grim:

Concerned Citizens for Nuclear Safety (CCNS) is a Santa Fe-based non-profit organization founded in 1988 in order to provide a voice for citizens' concerns about nuclear waste transportation through Santa Fe from Los Alamos National Laboratory (LANL) to the Waste Isolation Pilot Plant (WIPP), near Carlsbad, NM. CCNS recognizes that, because of their unique relationship as sister laboratories operated by the University of California, operations at LLNL may seriously effect operations at LANL.

Through this letter, CCNS expresses our deep concern about the health and environmental risks posed by the expanded nuclear weapons mission of LLNL in the indefinite future. We appreciate your focused attention to 1/31.04 this matter. Below we have outlined a number of specific concerns that, when taken cumulatively, lead us to the conclusion that the SWEIS is technically indefensible and must be resubmitted for public comment. This would allow the community, regulators and legislators the opportunity to evaluate the new information that is requested in these comments. These specific concerns include:

On April 27, 2004, the day of the public hearing to discuss the SWEIS, there was also a meeting of the Congressional Subcommittee on National Security, Emerging Threats, and International Relations for the 2/08.02 Committee on Government Reform. The subcommittee discussed the security of nuclear materials and highlighted potentially insurmountable problems with plutonium and highly enriched uranium at certain DOE sites, with a focus on the vulnerability of storage of special nuclear materials at LLNL.

CCNS is a 501(c)(3) organization and your nation is tax deductible to the extend of the law.

On May 7, 2004, Secretary Spencer Abraham outlined the deficiencies in the security of nuclear materials at LLNL and other DOE sites, including

Concerned Citizens for Nuclear Safety, Amy Williams, Media Network Coordinator Page 2 of 4

LANL. Secretary Abraham made a commitment to consider removing the special nuclear materials at LLNL by 2005. This recent acknowledgment of deficiencies in 2/08.02 security at LLNL make it imperative that the SWEIS include an alternative in which all special nuclear materials have been removed from the LLNL site. Secretary Abraham's cont. commitment makes this SWEIS as it is a foreseeable outcome within the next decade at Rather than reduce the amount of special nuclear materials onsite at LLNL, the draft SWEIS proposes to more than double the limit for plutonium storage at LLNL from 1,540 pounds to 3,300 pounds. Moreover, under the proposed action, the administrative limit for highly enriched uranium to be stored in Building 239 would 3/33.01 double, from 55 pounds to 110 pounds. 25.01 Seven million people live in areas surrounding LLNL and residences line the fence of LLNL's property. Plutonium is difficult to store safely because it can spontaneously ignite and burn under certain circumstances. Further, it poses a criticality risk when significant quantities are stored in close proximity. The amount of plutonium proposed to be stored at LLNL are enough to make more than 300 nuclear weapons.

2/08.02

Because of the risks presented to the surrounding communities, the risk to nonproliferation initiatives, storage hazards and very serious security concerns, CCNS believes that it is irresponsible to store plutonium, highly enriched uranium and tritium at LLNL. We request that DOE remove plutonium, highly enriched uranium and tritium from its inventory at LLNL, rather than increase that inventory.

CCNS believes that it is unsafe to increase the amount of tritium and plutonium that can be "in process" in one room at one time. Nevertheless, the draft SWEIS proposes to increase the "in process" limit at which tritium is considered a risk at LLNL 4/34.01 ten-fold, from just over 3 grams to 30 grams. The draft SWEIS also proposes to triple the "in process" limit at which plutonium is considered a risk from 44 pounds to 132 5/33.01 pounds. LLNL has a history of criticality violations with plutonium, as well as a history of tritium and plutonium releases. This is sufficient evidence that these amounts should 25.01 be decreased, rather than increased.

6/27.01

The draft SWEIS proposes to revive a project that was canceled more than 10 years ago because it was considered dangerous and unnecessary. The project, Plutonium-Atomic Vapor Laser Isotope Separation (AVLIS), is now called the Integrated Technology Project (ITP) and Advanced Materials Program (AMP). The project would heat and vaporize plutonium and shoot multiple laser beams through the vapor in order to isolate the plutonium isotopes. The ITP/AMP is a risk to environment and human health as well as important non-proliferation initiatives. We believe that the ITP/AMP should be canceled as the AVLIS was canceled in 1990.

7/37.01

The draft SWEIS designates LLNL as the testing site for new manufacturing technologies to produce plutonium pits for nuclear weapons. A pit is a softball-sized sphere of plutonium surrounded by conventional explosives that trigger its thermonuclear reaction. DOE says that these new technologies will foster the Modern Pit Facility (MPF), which has been proposed for one of five sites, including LANL and

2

March 2005 2-83 Chapter 2 - Comment Documents LLNL SW/SPEIS

Concerned Citizens for Nuclear Safety, Amy Williams, Media Network Coordinator Page 3 of 4

WIPP. Due to public and congressional pressure, the MPF was indefinitely delayed in January 2004. 7/37.01 The LLNL pit program would enable the MPF to produce as many as 500 new nuclear cont. weapons per year. CCNS requests that DOE abandon all plans for research of plutonium pit technologies at LLNL. We believe that it is imprudent and immature to pursue and finance this project considering that the MPF has been delayed. 8/26.01 6. The draft SWEIS indicates expanded quantities of plutofidality, fightly containing and lithium hydride at the National Ignition Facility (NIF) at LLNL. Using The draft SWEIS indicates expanded quantities of plutonium, highly enriched these materials at NIF will increase its utility for nuclear weapons development, including design of new types of nuclear weapons. It will also make NIF more hazardous to workers and the environment. This is not only a risk to public health and safety and non-proliferation initiatives, but it 9/26.03 will also result in high costs to the taxpayer. No cost estimate for this proposal has been released as yet. CCNS requests that DOE cancel these dangerous, polluting and unnecessary new experiments at NIF. 7. The draft SWEIS includes plans to manufacture tritium targets at LLNL. These targets are radioactive tritium-filled fuel pellets that NIF's 192 laser beams shoot in an attempt to create a thermonuclear explosion. Producing these targets will increase the amount of tritium that may used in any one room at LLNL at any given time from 3 10/26.04 grams to 30 grams, a tenfold increase. In the 1990s, LLNL stated that target fabrication would occur offsite because of LLNL's proximity to large populations. Further, LLNL has a history of tritium accidents, spills and releases. The NIF will increase the amount of airborne radioactivity emanating from LLNL. CCNS requests that DOE cancel plans to manufacture tritium targets for NIF at LLNL. Moreover, we urge cancellation of the NIF megalaser. Cancellation of NIF is a reasonable alternative that should be considered in the SWEIS. The draft SWEIS also calls for LLNL to develop diagnostics to enhance the 11/39.01 nation's readiness to conduct full-scale underground nuclear testing. This is a retroactive position that is directly contrary to the Comprehensive Test Ban Treaty, of which the U.S. is a signatory. All work to enhance test readiness should be terminated The draft SWEIS calls for co-locating a Biosafety Level-3 (BSL-3) facility with nuclear weapons activities in a classified area at LLNL. The plan proposes genetic modification and aerosolizing of live, deadly bioagents such as anthrax, tuberculosis, 12/35.01 smallpox and plague. This would weaken the international biological weapons treaty and it poses a risk to workers, public health and safety and the environment. The draft SWEIS does not adequately address these programs or their consequences. Construction of the portable BSL-3 facility should be halted immediately. All plans to operate a BSL-3 facility at LLNL should be abandoned immediately. 13/14.01 deficiencies relative to current code. The draft SWEIS should include a complete list of

Concerned Citizens for Nuclear Safety, Amy Williams, Media Network Coordinator Page 4 of 4

13/14.01 cont.	these buildings and an accounting of the dangerous radioactive, chemical, hazardous or biological materials that are stored within them. LLNL is located within one kilometer of two significant earthquake faults, including the Las Positias fault zone, less than 200 feet from the LLNL boundary. DOE must stop immediately all work done in buildings at LLNL that are not in full compliance with earthquake safety code.
14/22.01	11. More than 1,000 drums of transuranic and mixed transuranic waste are scheduled to be transported from LLNL to WIPP. This action and its consequences, not only at LLNL but also along all transportation routes from LLNL to WIPP, must be included in the draft SWEIS.
15/20.05	12. The draft SWEIS does not mention that DOE is currently considering replacing the double-walled shipping containers currently used for WIPP shipments with single-walled containers that may compromise human health and safety. CCNS believes that no waste should be shipped from LLNL to WIPP until it is guaranteed that DOE will use nothing but double-walled containers. The draft SWEIS should contain this guarantee.
16/01.01	13. The Purpose and Need statement in the draft SWEIS relies heavily upon the classified U.S. Nuclear Posture Review, which was approved with no public comment and calls for an aggressive modernization and manufacturing base in the U.S. nuclear weapons complex. This is directly contrary to requirements under the nuclear Non-Proliferation Treaty of 1970 (NPT), which requires the U.S. to shift from "developing and producing new weapons designs to dismantiling obsolete weapons and maintaining a smaller weapons aresnal." CCNS requests that DOE revise the Purpose and Need statement to include U.S. requirements under the NPT.
17/07.01	Further, the Purpose and Need Statement in the draft SWEIS nearly omits LLNL's important role in civilian science research. This omission flaws the alternatives analysis in the draft SWEIS by neglecting to consider the expanded role that civilian science programs could play at LLNL in the next decade.
	The alternatives analysis should consider LLNL's role in light of commitments to the NPT and its civilian science mission.
	Thank you for your consideration of these comments. Should you have any questions or comments, please feel free to contact me by email at $\underline{awilliams@nuclearactive.org}$ or by telephone.
	Sincerely, Amy Williams Media Network Coordinator
	4

2-84 March 2005